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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,032	07/11/2003	Kenichi Hiraoka	239802US0CONT	2705

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1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER
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KUHNS, SARAH LOUISE

ART UNIT	PAPER NUMBER
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1761

DATE MAILED: 04/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/617,032

Applicant(s)

HIRAOKA ET AL.

Examiner

Sarah L. Kuhns

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,7-9 and 14-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,7-9 and 14-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 8, 9, and 14-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Yip, U.S. Patent 3,852,489. "Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

In regard to claims 8 and 14, Yip discloses a fresh fish egg product made from treatment with the aqueous alkali solution (column 2, line 36).

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In regard to claim 9, Yip discloses a fresh fish egg product wherein the fish eggs are from salmon (column 2, line 36).

In regard to claims 15 and 16, Yip discloses a fish product that is salted hard roe of salmon (column 2, line 27).

***Claim Rejections - 35 USC § 103***

Claim 1, 2, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneyasu et al., JP 09271786 A, in view of Highfill, U.S. Patent 4,962,728 and Bender et al., U.S. Patent 5,262,186.

In regard to claim 1, Kaneyasu discloses a process for treating fresh fish, comprising keeping living fish in an aqueous alkali solution (abstract). It is unclear from the abstract whether the fish are ever washed or neutralized. Highfill also discloses a process for treating live fish comprising keeping living fish in an aqueous alkali solution (column 1, line 64), but does not disclose the washing or neutralizing of the fish. However, Bender teaches the treatment of fish with an alkali solution as well. Bender additionally discloses that the fish can be washed with and/or neutralized with acid following the alkali treatment (column 5, line 45). It should be noted that the use of alkali salts and their applicability prior and post processing of fish and shellfish is well known. Alkali salts such as sodium hydroxide, sodium carbonate, and disodium and trisodium phosphate are commonly used. For instance Kaneyasu teaches utilizing the alkali solution to regulate pH of water to prevent deterioration. Bender teaches the use of an alkali salt solution to reduce, remove, retard, or control bacteria without causing

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organoleptic depreciation. Highfill uses alkali salt solution to extend the survival time of live fish during confinement. It would be obvious to wash and/or neutralize the fish to remove the aqueous alkali solution after treatment is complete. The alkali salts that remain on the fish will continue to prevent the growth of bacteria, as taught by Bender, but washing off the excess solution will help to avoid altering the taste or appearance of the fish product.

Bedford discloses the use of dry alkalis, such as sodium carbonate, potassium carbonate (column 2, lines 13-17), sodium hydroxide, potassium hydroxides, and alkali salts (column 3, lines 18-25), in the preservation of fish viscera. It therefore would have been obvious to use one of these compounds in the solution of Kaneyasu since they were known to one of ordinary skill in the art to be effective preserving agents. Further, it would have been obvious to remove the internal organs or adexna from the fish treated by the method of Kaneyasu since it was known that fish viscera are preserved by alkali salts, as taught by Bedford, and food products made from viscera, such as ovaries and milt, have been found to be popular.

In regard to claim 2, the abstract of Kaneyasu does not disclose specific species of fish. However, Bender discloses that treatment with an alkali solution can be performed on any fish (column 4, line 4) and specifically discloses salmon (column 4, line 10). It therefore would have been obvious to use salmon in the method of Kaneyasu because food products from salmon, such as sujiko and ikura, have proven to be popular dishes.

In regard to claim 7, the abstract of Kaneyasu does not disclose the exact pH of the alkali solution. Bender discloses a preferred pH range of 11.6-13.5 (column 4, line 63). It would therefore be obvious to use such a pH for the alkali solution in order to ensure that all bacteria present is killed or at least greatly reduced.

### ***Response to Arguments***

Applicant's arguments filed February 7<sup>th</sup>, 2005, have been fully considered but they are not persuasive.

Applicant argues that the prior art fails to teach the step of removing the organs from the live fish. However, it would have been obvious to remove the internal organs or adexna from the fish treated by the method of Kaneyasu since it was known that fish viscera are preserved by alkali salts, as taught by Bedford, and food products made from viscera, such as ovaries and milt, have been found to be popular.

Applicant argues that Kaneyasu and Highfill fail to disclose the steps of washing or neutralizing the fish and utilizing an alkali solution with a pH within the claimed range. However, the examiner relies on Bender to show that the limitations imposed by these steps were known in the art. Bender teaches that alkali salts that remain on the fish will continue to prevent the growth of bacteria, but washing off the excess solution will help to avoid altering the taste or appearance of the fish product. Bender also discloses a preferred pH range of 11.6-13.5 (column 4, line 63). It would therefore be obvious to use such a pH for the alkali solution in order to ensure that all bacteria present is killed or at least greatly reduced.

Applicant also argues that Bender fails to disclose the treating of live fish with an alkaline solution, washing and isolating the internal organs, and the specific alkali solutions claimed. However, both Kaneyasu and Highfill teach the treatment of living fish with an alkali solution and Bedford teaches that alkalis, such as sodium carbonate, potassium carbonate, sodium hydroxide, potassium hydroxides, and alkali salts are effective in the preservation of fish viscera. Bender is merely relied on for the general teachings that washing the fish to remove excess solution will help to avoid altering the taste or appearance of the fish product and a pH range of 11.6-13.5 ensures that all bacteria present is killed or at least greatly reduced.

Applicant's arguments in regard to Furuta are moot in view of the new grounds of rejection.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). ✓

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sarah L. Kuhns whose telephone number is 571-272-1088. The examiner can normally be reached on Monday - Friday from 8:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached at 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SLK

  
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